
HOGGI[®]



SWINGBO VTi Service instructions

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SWINGBO VTi- Service and maintenance instructions

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1 Model identification

1.1 Model identification (label)

(The label is attached to the rear axle tube))

HOGGI 3248-10SB-XXX MD
SWINGBO VTi
Kantelbarer Rollstuhl
Hoggi GmbH
Eulerstr. 27
56235 Ransbach-Baumbach
MADE IN GERMANY
(01)04047349096062(21)202178999
max. load 60kg
2021/05/09
2021178999

Colour code

Article number

Serial number

CE label

Classification / Product name

Date of manufacture

Maximum load / load capacity

Manufacturer

Place of manufacture

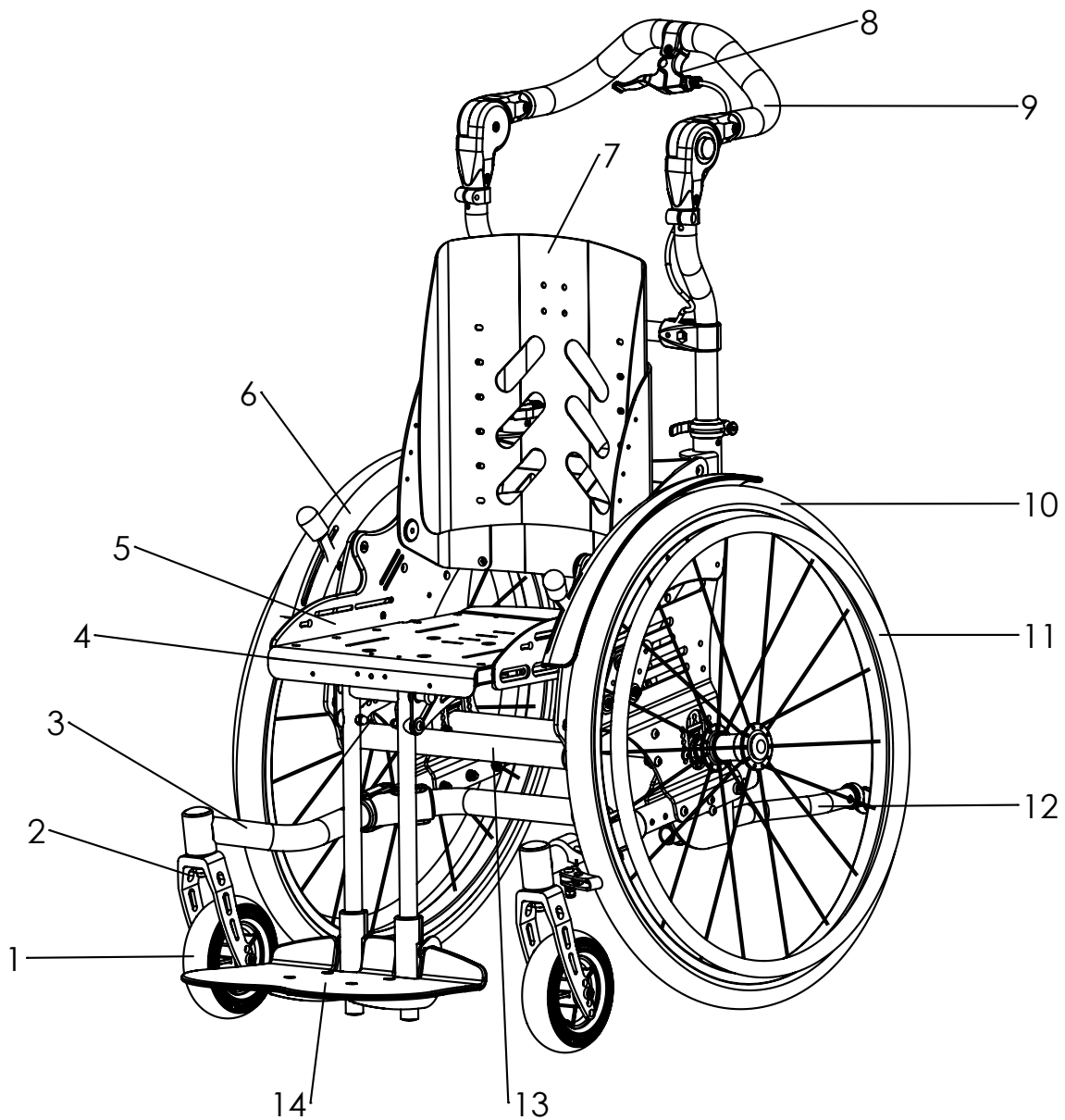
Year of manufacture

UDI Code

1.2 Basic configuration

- Aluminium rigid frame with centre of gravity tilt in space
- Wheel base adjustable
- Wheel locks integrated in side panels
- **HOGGI** light rear wheels incl. push rims (removable via quick release axle)
- Seat depth adjustable by apx. 8 cm
- Choice of seat widths 24 - 36 cm
- Push-handle or push-bar included
- Adjustable front seat height: 36 cm up to 49cm
- Adjustable tilt in space: -5° to +45°
- Back angle adjustable
- Camber 6°, 9° or 12°
- Load capacity: 60 kg

2 SWINGBO VTi Overview



Pos	Article number	Article description
1	12XX-XXX	Front wheels
2	1281-00XX	Caster fork
3	3248-11SBE-xxx	Bais frame
4	3246-22SBE	Seat frame
4	3246-25SBE	Seat surface
5	3246-151XE	Seat adapter
6	3248-16XXE	Fender
7	3245-28XXE-xxx	Back panel
8	3246-1900E	Tilt adjustment
9	3245-XXSBE	Pusch bar, options
10	1292-XXX	Rear wheels
11	1204-00XX	Push rims
12	3248-1800E	Tilt stop
13	3246-12SBE	Cross tube
14	3246-40XX	Foot rest hanger
	3240-XXXX	Foot board

3 Common Information

3.1 Preface

Thank you for selecting the **SWINGBO-VTi** wheelchair. We have designed this high-quality product to make your life safer and easier, and we've included this manual to help you use and care for it. Please read the following instructions to make sure you use this product as recommended. If you have any further questions, or if you have any problems, please contact your healthcare provider.

We hope that **SWINGBO-VTi** meets your expectations.

We reserve technical modifications regarding the specified model in this manual. Before using the wheelchair the first time, this manual has to be read and understood by patient and support personnel in order to ensure a safe handling with the wheelchair.

Regular maintenance is important - it increases safety and prolongs the life of the product. Every rehab product should be checked and serviced once a year.

However, it is recommended to check, readjust and, if necessary, service products with a high frequency of use, with users in growth or users with a changing clinical picture at 6-month intervals.

Only original spare parts should be used for all service and maintenance work.

The service and maintenance work described here should only be carried out by trained specialist personnel and not by the user of the aid.

These service and maintenance instructions refer to the respective spare parts catalogs and operating instructions of the products described. Please use all documents together.

Use the maintenance schedule (Chapter 5.2, Checklist to tick off) as a copy template.

Retain completed maintenance schedules and provide a copy to the customer.

SWINGBO VTi	User manual	1910-0036-EN
SWINGBO VTi	Spare parts catalog	1910-0009-EN

3.2 Application

SWINGBO VTi wheelchair is designed solely for individual indoor and outdoor use by children and adolescents who are unable to walk or who have a walking impediment, and can be operated by the patient or by another person.

Assistance may be required due to:

- Paralysis (paraplegia / tetraplegia or tetraparesis)
- Loss of limbs (dysmelia/lower limb amputation)
- Infantile/spastic cerebral palsy
- Spina Bifida
- Muscle and nerve disorders
- Osteogenesis Imperfecta
- Poliomyelitis

SWINGBO VTi wheelchair is able to be used for further service. For further service the product has to be cleaned and sanitised efficiently. Afterwards the product has to be checked concerning condition, wearout and damage by an authorised technician. All damaged and inappropriate parts need to be changed. Some components can be used again, e.g. rear wheels, steering wheels or push handles. Please see also the service manual for detailed information.

3.3 Declaration of Conformity

HOGGI GmbH as manufacturer declares under sole responsibility that the **SWINGBO VTi system wheelchair** meets the general safety and performance requirements to Annex I of the Regulation (EU) 2017/745 of the European Parliament and of the Council. Applicable harmonized standards have been applied. **SWINGBO VTi** meets the requirements of ISO 7176-8, DIN EN ISO 12182 and DIN EN ISO 12183.

3.4 Terms of Warranty

Warranty applies only when the product is used according to the specified conditions and for the intended purposes, following all manufacturer's recommendations. The manufacturer is not responsible for damages caused by components and spare parts not approved by the manufacturer. See also § 8 of terms and conditions on:

www.hoggi.de

3.5 Customer service

Our customer service will be happy to answer any technical questions you may have. Please refer to the last page for contact addresses and telephone numbers.

3.6 Service and repairs

Service and repairs on the **SWINGBO VTi** wheelchair may only be carried out by your specialist dealer. In case of problems, contact your responsible specialist dealer. In case of repairs, you will only receive original spare parts there.

Spare parts and replacement units are available during the entire service life of the product, but only for a maximum of 2 years after the sale of the last product in this series.

The wheelchair is custom made for the first time user. Therefore, no replacement wheelchair is available in the initial configuration. In order to ensure a correct spare parts delivery the serial no. of your wheelchair is required.

We are happy to help you find a dealer near you.

You can reach us at: **info@hoggi.de**

3.7 Packing and shipping instructions

If **SWINGBO VTi** has to be sent back to the manufacturer for repair or exchange the product must be thoroughly cleaned/disinfected beforehand and put in a hygienically safe condition.

Packaging is done by wrapping the product in a clean film, ideally with air cushions and the subsequent use of a sufficiently large cardboard box, so that no transport damage can occur.

4 Safety instructions

4.1 Meaning of symbols



Caution!
Warning of possible danger of accident and injury. Warning of possible technical damage.



Information!
About use of product.



Information!
For service-personnel.



Attention!
Read manual before use!

4.2 Safety instructions

For all maintenance and repair work, you should generally observe a few points:



Attention!
Familiarize yourself with the functions of the product. If you are not familiar with the product, study the user manual before testing. If no user manuals are available, request them from us. You can also download documents from our homepage at: **www.hoggi.de**



Attention!
Study the service and maintenance instructions before starting work.



Attention!
Use suitable tools (see page 4 ff.).



Attention!
Wear suitable clothing and, if necessary, gloves and protective goggles.



Attention!
Secure the product from tipping over or falling down, e.g. from the workbench.



Attention!
Clean / disinfect the product before starting the test. If necessary, observe the instructions in the user manual and product-specific test instructions.



Note!
Screws and nuts with thread locking are used for a large number of screw connections. If you have to open such screw connections, replace the respective nut or screw with one with new thread locking. If new nuts or bolts with thread locking are not available, use liquid thread locking compound with medium strength (e.g. Loctite 241 or Euro Lock A24.20).

5 Required tools and maintenance schedule

5.1 Required tools

The following list shows the tools and utilities required for service.



Reversible ratchet and sockets
size 8-24



Torque wrench
Measuring ranges 5-50 Nm



Wrench
Size 6 - 24



Hexagon wrench
Gr. 3 - 6



Screwdriver
Blade width 2.5 3.5 and 5.5



Phillips screwdriver
Size 2



Plastic hammer



Hammer approx. 300 g



Carpet knife with sickle and
standard blade



Side cutter



Liquid thread locking
„medium strength“



Riveting pliers for rivets up to
5 mm

Maintenance schedule for regular inspection		SWINGBO-VTi System wheelchair		Customer:	
Pos.	Area	Check (Checklist to tick off <input checked="" type="checkbox"/>)			
	Serial number:	1.) Function / Setting (see instruction manual)	2.) none damage / deformation	3.) Screw connections	
1. Basic product					
1.1	Frame	- Damages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Base plates and Cross tube	- Active degree - Seat height	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Rear axle	- Seat height	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Seat unit	- Tilt - Seat depth	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Back system & push bar/ handle variant	- Height adjustment back - Angle adjustment back - Height adjustment for push bar/ handles - Angle adjustment for push bar - Remove - Fold down	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.6	Braking system	- Brakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7	Wheel fork holder	- Swivelling of the wheel forks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8	Steering wheels	- Tires - Air pressure - Running behavior of the wheels	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.9	Rear wheels	- Tires - Air pressure - Running behavior of the wheels - Camber - Quick release	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.10	Push rim	- Mounting position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Do the settings on the wheelchair meet the user's requirements?		<input type="checkbox"/>		
Notes:					

		1.) Function / Setting	2.) none damage / deformation	3.) Screw connections
2. Accessories				
2.1	Fender	- Height adjustment	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Anti tip and tip assist	- Anti tip - Swivel away - Angle adjustment	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
2.3	Footrest hanger	- Angle adjustment	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Footrest bracket	- Lower leg length - Folding away the footrest - Footrest lock	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
2.5	Footrests	- Footrest angle	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Seat / back cushion	- Cushion	<input type="checkbox"/>	
2.7	Tie down kit	- Support of the anchorages	<input type="checkbox"/>	<input type="checkbox"/>
2.8	Spoke guards	- Spoke guards	<input type="checkbox"/>	<input type="checkbox"/>
2.9	Headrest standard with cushion	- Height adjustment - Padding	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
2.10	Headrest with occiput upholstery	- Height adjustment - Angle adjustment - Padding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2.11	Thoracic support	- Height adjustment - Width adjustment - Depth adjustment - Padding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.12	Chest-/ thoracic support	- Height adjustment - Width adjustment - Depth and angle adjustment - Padding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.13	Hip support	- Width adjustment - Depth adjustment - Padding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2.14	Abduction block	- Pivot - Removing - Padding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2.15	Armrests	- Height adjustment	<input type="checkbox"/>	<input type="checkbox"/>
2.16	Therapy tray	- Clamping unit	<input type="checkbox"/>	<input type="checkbox"/>
2.17	Belt fixings: Lap belt, 4-point lap belt, ankle hugger	- Closures	<input type="checkbox"/>	<input type="checkbox"/>
	Do the settings of the accessoires meet the user's requirements?		<input type="checkbox"/>	
Notes				
The maintenance was performed by:..... on:.....				



6. Seat settings

6.1 Seat height

SWINGBO VTi offers seat height adjustment from 37 - 47 cm.

The adjustment is influenced by 3 things:

the wheel fork and the correspondingly selected hole position, the axle position and the seat position.



Steering wheel fork and hole position

2 different fork types are available. Short or long.

The short fork offers 3 hole positions, the long 4.

The holes are spaced 12.5 mm apart, giving an adjustment range of 2.5 cm for the short fork and 3.75 cm for the long fork.



Seat position

The seat unit can basically be inserted into the upper or lower slotted hole of the base plate. This results in a seat height difference of 2 cm.

To loosen the seat unit completely, remove the marked screws on both sides. Then the base plates can be carefully moved apart and the seat can be removed.



Axle position

Finally, it is possible to position the axle at different heights. The base plate offers 6 positions of 7.5 mm each.

This results in an adjustment range of 3.75 cm in total.

Depending on the wheel camber and individual requirements, the following guidelines result:

Seat heights SWINGBO-VTi (3°)																					
Rear wheels	Steering wheels																				
	100							125							140						
	SH	SH BB	AP	CF	SWP	SP	AF	SH	SH BB	AP	CF	SWP	SP	AF	SH	SH BB	AP	CF	SWP	SP	AF
20°	376	37	1	short	2	deep	2	376	37	1	short	1	deep	2	384	38	2	short	1	deep	2
	384	38	2	short	3	deep	0	384	38	2	short	2	deep	0	391	39	3	short	2	deep	0
	396	39	1	short		high	2	396	39	1	short		high	2	404	40	2	short	1	high	2
	404	40	2	short			0	399	40	4	long	1	deep	1	411	41	3	short		high	0
	414	41	6	short	3	deep	2	404	41	2	short		high	0	426	42	5	long	1	high	1
	419	42	4	short	2	high	1	414	42	6	long	2	deep	1							
	434	43	6	short	3	high	1	419	42	4	long	3	high	1							
								434	43	6	long	2	high	1							
22°															394	40	1	short	2	deep	1
	401	40	2	long	2	deep	1	401	40	2	long	1	deep	1	409	41	3	short	3	deep	1
	416	41	4	long	3	deep	2	416	41	4	long	2	deep	2	414	42	1	short		high	1
	421	42	2	long	2	high	1	421	42	2	long	1	high	1	431	43	6	long	3	deep	0
	424	43	5	long	4	deep	0	424	43	5	long	3	deep	0	444	44	5	long	2	high	2
	436	44	4	long	3	high	2	436	44	4	long	2	high	2	451	45	6	long	3	high	0
	444	45	5	long	4	high	0	444	45	5	long	3	high	0							
24°	423	42	1	long	4	deep	0	423	42	1	long	3	deep	0	423	42	1	long	2	deep	2
	443	44	1	long	4	high	0	438	43	3	long	4	deep	1	431	43	2	long	3	deep	0
								443	44	1	long	3	high	0	443	44	1	long	2	high	2
								458	46	3	long	4	high	1	446	45	4	long	4	deep	1
															466	47	4	long	4	high	1

SH = Seat height; SP = Seat position; AP = Axle position; CF = Caster Fork; SWP = Steering wheel position; AF = Amount; U-disc above fork

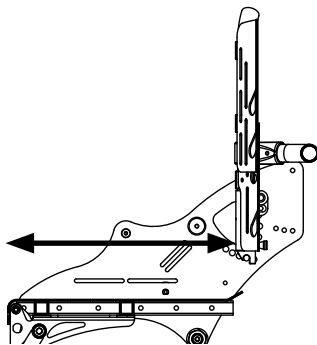
Seat heights SWINGBO-VTi (6°)																					
Rear wheels	Steering wheels																				
	100							125							140						
	SH	SH BB	AP	SP	CF	SWP	OG	SH	SH BB	AP	SP	CF	SWP	OG	SH	SH BB	AP	SP	CF	SWP	OG
20°	371	37	1	deep	short	2	0	371	37	1	deep	short	1	0	378	38	2	deep	short	1	0
	386	38	3	deep	short	3	0	386	38	3	deep	short	2	1	393	39	4	deep	short	2	1
	391	39	1	high	short	2	0	391	39	1	hoch	short	1	0	398	40	2	high	short	1	0
	401	40	5	deep	long	2	1	401	40	5	deep	short	3	2	408	41	6	deep	long	1	1
	406	41	3	high	long	1	0	406	41	3	high	short	2	1	413	42	4	high	short	1	1
	421	42	5	high	long	2	1	421	42	5	high	long	1	2	428	43	6	high	long	1	1
22°																					
	388	39	1	deep	short	3	2	388	39	1	deep	short	2	1	395	40	2	deep	short	2	1
	403	40	3	deep	long	2	2	403	40	3	deep	short	3	2	410	41	4	deep	long	1	2
	410	41	4	deep	long	3	0	403	40	3	deep	long	1	2	418	42	5	deep	long	2	0
	423	42	3	high	long	2	2	410	41	4	deep	long	2	0	430	43	4	high	long	1	2
	425		6	deep	long	4	1	423	42	3	high	long	1	2	430	43	4	high	short	3	2
	430	43	4	high	long	3	0	430	43	4	high	long	2	0	438	44	5	high	long	2	0
	445	44	6	high	long	4	1	445	44	6	high	long	3	1							
24°																					
															417	42	1	deep	long	2	0
	425	43	2	deep	long	4	1	425	43	2	deep	long	3	1	432	43	3	deep	long	3	1
								440	44	4	deep	long	4	2	437	44	1	high	long	2	0
	445	45	2	high	long	4	1	445	45	2	high	long	3	1	452	45	3	high	long	3	1
								460	46	4	high	long	4	2	467	46	5	high	long	4	2

SH = Seat height; SP = Seat position; AP = Axle position; CF = Caster Fork; SWP = Steering wheel position; AF = Amount; U-disc above fork

Seat heights SWINGBO-VTi (9°)

Rear wheels	Steering wheels																											
	100							125							140							140						
	SH	SH BB	AP	CF	SWP	SP	AF	SH	SH BB	AP	CF	SWP	SP	AF	SH	SH BB	AP	CF	SWP	SP	AF	SH	SH BB	AP	CF	SWP	SP	AF
20°																												
	364	36	1	short	1	deep	2	371	37	2	short	1	deep	0	379	38	3	short	3	deep	0							
	371	37	2	short	2	deep	0	386	38	4	short	2	deep	1	399	40	3	short	3	high	0							
	384	38	1	short	1	high	2	391	39	2	short	1	hoch	0														
	391	39	2	short		hoch	0	401	40	6	long	1	deep	1														
	401	40	6	long	2	deep	1	406	41	4	kurz	2	high	1														
	406	41	4	short	3	high	1	421	42	6	long	1	high	1														
	421	42	6	long	2	high	1																					
22°																												
	388	39	2	long	1	deep	1	388	39	2	long	2	deep	1	380	38	1	short	1	deep	1							
	403	40	4	long	2	deep	2	403	40	4	long	1	deep	2	395	39	3	short	2	deep	1							
	410	41	5	long	3	deep	0	410	41	5	long	2	deep	0	400	40	1	short	1	high	1							
	423	42	4	long	2	high	2	423	42	4	long	1	high	2	410	41	5	long	1	deep	2							
	430	43	5	long	3	high	0	430	43	5	long	2	high	0	418	42	6	long	2	deep	0							
															430	43	5	long	1	high	2							
24°															438	44	6	long	2	high	0							
	424	42	3	long	4	deep	1	417	42	2	long	2	deep	2	409	41	1	long	1	deep	2							
	429	43	1	long	3	high	0	424	43	3	long	3	deep	1	424	42	3	long	2	deep	2							
	444	44	3	long	4	high	0	439	44	5	long	4	deep	2	432	43	4	long	3	deep	0							
								444	45	3	long	3	high	1	444	44	3	long	2	high	2							
								459	46	5	long	4	high	2	447	45	6	long	4	deep	2							
															452	46	4	long	3	high	0							
														467	47	6	long	4	high	2								

iH = Seat height; SP = Seat position; AP = Axle position; CF = Caster Fork; SWP = Steering wheel position; AF = Amount; U-disc above fork



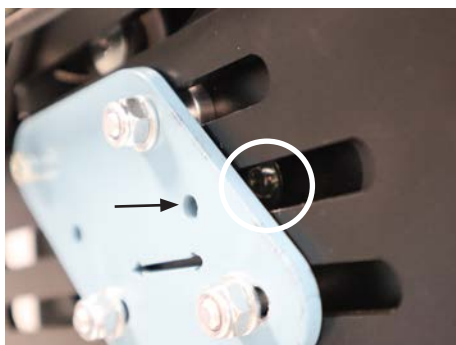
6.2 Seat depth

SWINGBO VTi offers a seat depth adjustment range of 8 cm. Measured from the outer edge of the backrest plate to the front edge of the seat plate.

General adjustment range:
VTi 24 - 42 cm



To adjust the seat depth, a total of 4 screws must be loosened. First, the chair is tilted to 45° to reach and loosen the front screw connections.

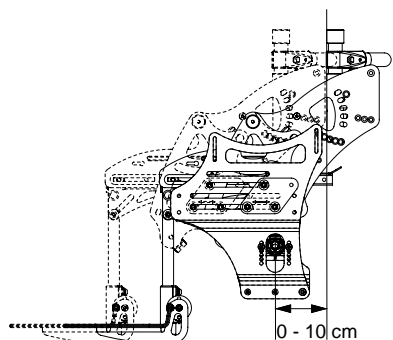


After the front screw connections have been loosened, the rear screw connections must be found.

Due to the design of the SWINGBO VTi and the individual seat height settings, the rear screw connections are not always directly visible. In this case, the seat unit may have to be moved to a different seat angle position in order to make the screw connection between the oblong holes visible.

Here it is also possible to work through the hole on the pressure plate with a 4 mm Allen key.

➔ The seat plate can then be moved forwards and backwards.



6.3 Active degree

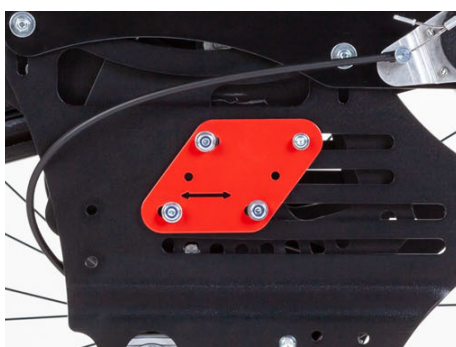
The active degree describes the ratio of the position of the backrest relative to the drive wheel axis. The further the backrest is set behind the drive wheel axle, the more active SWINGBO VTi can be driven.

SWINGBO VTi offers a total active degree adjustment range of 10 cm.



Setting active degree 0 - 5 cm:

If the pressure plate is attached to the base plate as shown, moving the seat unit results in an adjustment range of 0 - 5 cm.



Setting active degree 6 - 10 cm:

If a larger active degree range is to be set, both pressure plates must be loosened and removed.

Then the plates are exchanged from the left side of the chair to the right and vice versa.

The resulting attachment is shown in the picture.



6.4 Back height

First of all, a distinction must be made between a trough-shaped backrest and an angle-adjustable backrest.

The trough back offers the following adjustment ranges depending on the seat width:

Seat width (SW)	24	26	28	30	32	34	36
Backrest height for trough shaped back	36 - 44	37 - 45	38 - 48	39 - 49	40 - 50	42 - 54	43 - 55



After loosening the indicated screw connections, the back can be pulled out or pushed in.

The angle-adjustable back offers the following ranges:

Seat width (SW)	24	26	28	30	32	34	36
Backrest height for angle adjustable back	33 - 42	35 - 44	37 - 46	39 - 48	41 - 50	43 - 52	45 - 54



After loosening the indicated screw connections, the back can be pulled out or pushed in.



6.5 Seat angle

The tilt in space of SWINGBO VTi can be adjusted between -5° and $+45^{\circ}$.

13 positions of 4° each can be individually adjusted.



The tilt is triggered by a locking pin pull, which is controlled by a release lever on the push bar or push handle.



6.6 Back angle adjustment

The back angle adjustment on the SWINGBO VTi depends on the selected push bar/push handle variant and the corresponding back. A distinction must be made here:

1. Push bar/handles removable with angle adjustable back
2. Push bar/handles foldable with back in trough shape
3. Angle-adjustable and foldable push bar with trough-shaped backrest

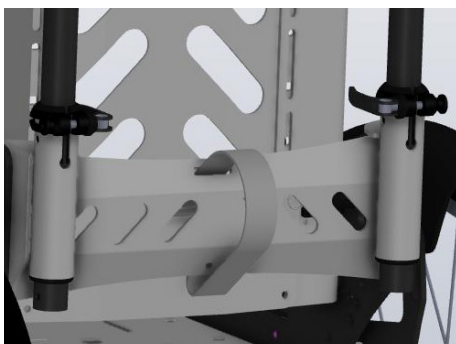


Push bar/handles removable with back angle adjustable

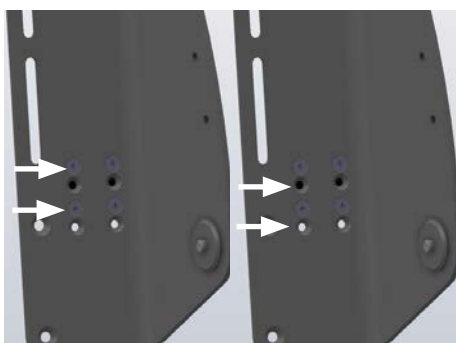
The angle of the push handles themselves cannot be adjusted, but they can be removed for small transport dimensions via clamping levers and tripod springs.



The back sits here in front of the of the push handles or the push bar and remains unaffected by their function.



The back itself offers a total adjustment range of 40° and can be operated via the release strap on the back. In addition, the back can be folded forwards for small transport dimensions.



Depending on how the back panel is screwed to the base, the adjustment range is either 75°-115° or 80°-120°

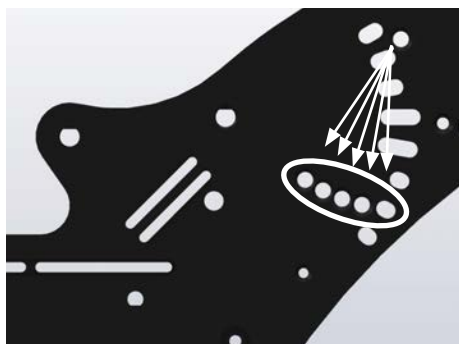
If the back plate is screwed in the positions shown on the left, the adjustment range is 80°-120°.

If the backrest panel is screwed into the positions shown on the right the adjustment range is 75°-115°.



Push bar/handles foldable with trough-shaped backrest

In contrast to the detachable push handles, the back is directly attached to the foldable push handles. In addition, the back is always used in the shape of a trough.

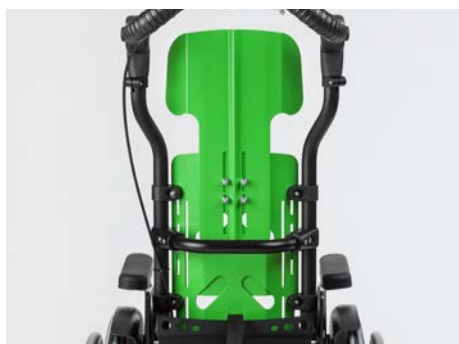


The back angle can be set to 5 different angles depending on how it is screwed to the seat mount.

- Front hole: 105°
- Second hole: 100°
- Third hole: 95°
- Fourth hole: 90°
- Rear hole: 85°



In addition, the back can also be folded down with the push handles/bars to achieve a small transport size
To do this, the releases on the left and right are pushed upwards and then the back is folded down.

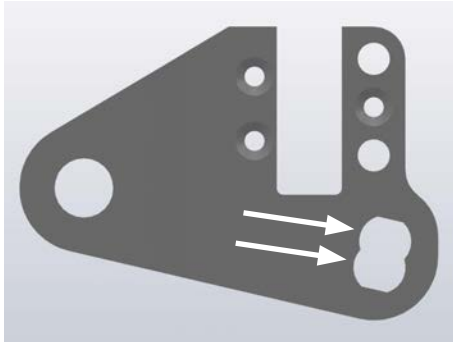


Angle-adjustable and foldable push bar with trough-shaped backrest.

As with the foldable push handles/ bar, only the moulded backrest can be used!



The back with the push handles/bars offers an adjustment range of 40° and can be operated via the release strap on the back.



Depending on how the latch housing is screwed to the back base plate, there is an adjustment range of either 75°-115° or 80°-120°.

If the housing is screwed in the upper position shown, the adjustment range is 80°-120°.

If the housing is screwed in the lower position shown, the adjustment range is 75°-115°.



Bolting point of the latch housing with locking bolt on the back base plate.



6.7 Lower leg length

SWINGBO VTi can basically be equipped with 3 different footrest hanger

Shown here is the footrest hanger 90°.

The footrest hanger can be swivelled up via the towing latches, but not fixed.

VTi version for short LL (16-27 cm) or long LL (16-37 cm)



Footrest hanger angle adjustable

Adjustable between 85° and 160° via clamping lever.

VTi version for short LL (19-27 cm) or long LL (19-37 cm)



Single foot rest hanger, for individual adjustment of both legs

Adjustable between 85° and 160° via clamping lever.

VTi version for short LL (19-27 cm) or long LL (19-37 cm)



The height of the footrest is adjusted by loosening the wing nuts on the back.
The footrest mounted on the support can then be adjusted to the individual needs.



6.8 Footrest angle

The footrest angle is preset to 90°. The adjustment range is $\pm 10^\circ$ (80° - 100°).



After loosening the four marked screw connections on the footrest holder the footrest can be adjusted in depth.

This changes the anchor point of the footrest and thus also the footrest angle. The further the footrest is pulled out to the front, the the greater the angle. If the procedure is reversed the angle decreases accordingly.

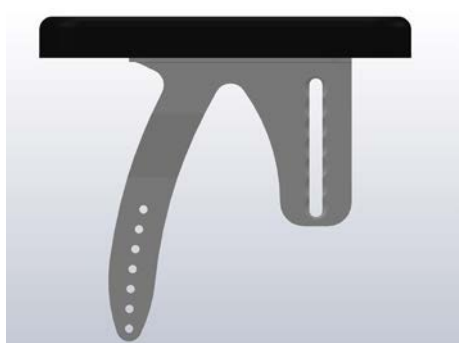


6.9 Armrest height and angle

SWINGBO VTi offers various adjustable armrest heights.

Standard: Gr. 1: 14-21 cm
Gr. 2: 19-26 cm

Tilt compensation: Gr.1: 15-23 cm
Gr. 2: 18-26 cm



The standard armrests always remain firmly in position and move analogously to the wheelchair movement during the tilting movement.

The height can be adjusted in steps of 7x1.25 cm by repositioning the front and rear screw connections.



The armrest with tilt compensation remains as horizontal as possible during the tilting movement and is therefore more suitable for use with a table.

The height can be adjusted in x1.5 cm steps by repositioning the front and rear screw connections.



To loosen the screws, first tilt the chair to 45°. Then the front screws can be loosened first.



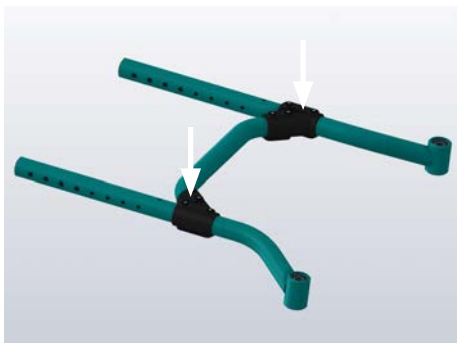
Then loosen the rear screws and adjust the armrests to the desired height.



By using a different hole position, the general angle of inclination can also be adjusted.

If the front hole is used as shown here, the armrest is aligned more steeply.

If the rear hole is used, the flatter and more horizontal the armrest is in a tilted position.



7. Maintenance schedule

7.1 Frame

Functional test:

- Check for general damage or deformation to the frame structure
- Cracks in the construction
- Cross tube bolting



7.2 Base plates und cross tube

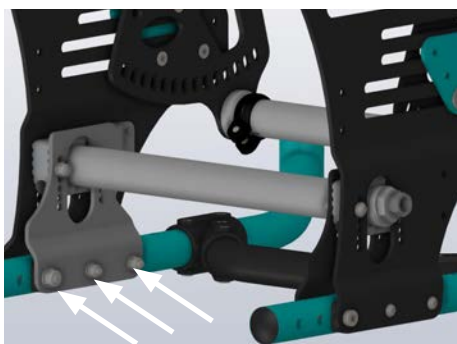
Functional test:

- Check for general damage
- Adjustment of the active degree via pressure plates



Check of the screw connections:

- Screw connections to the cross tube
- Connection of the side panels to the frame and to the internal adapter plates

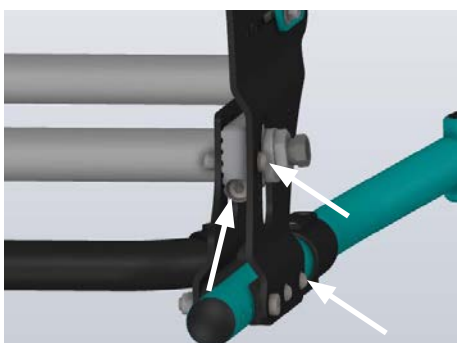


7.3 Rear axle

Functional test:

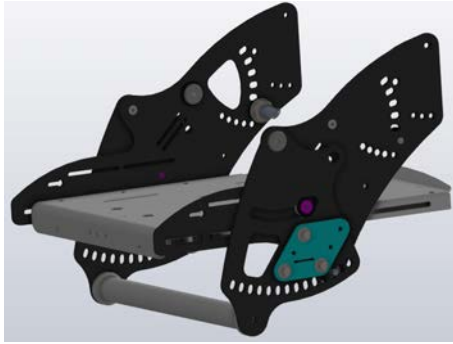
- Check for general damage
- Height position of the axle correctly adjusted
- Correct frame hole position of adapter plates depending on selected frame size

=> The larger the rear wheel, the further back the base plates are bolted to the frame!



Check of the screw connections:

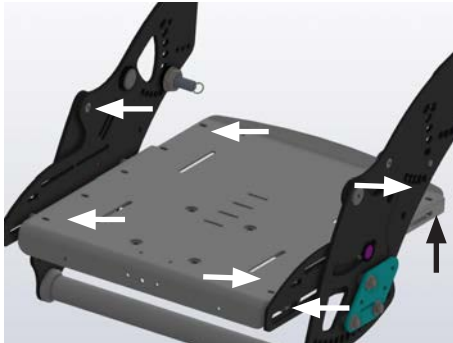
- Connection of the side panels to the frame and to the internal adapter plates
- Screw connection of the height position



7.4 Seat unit

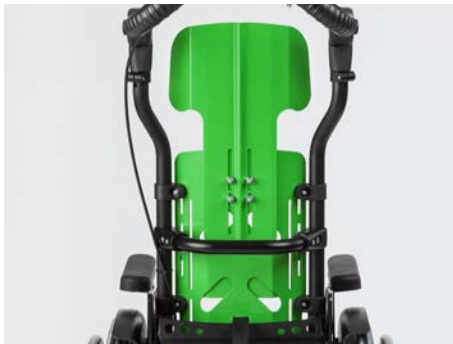
Functional test:

- Check for general damage
- Correct seat depth
- Tilt via locking bolt tension



Check of the screw connections:

- Seat frame to the support brackets for the adjustment of the seat depth
- Seat plate on the seat frame
- Seat mounts to the tilt bearings



7.5 Back system & push bar/handle variant

Functional test:

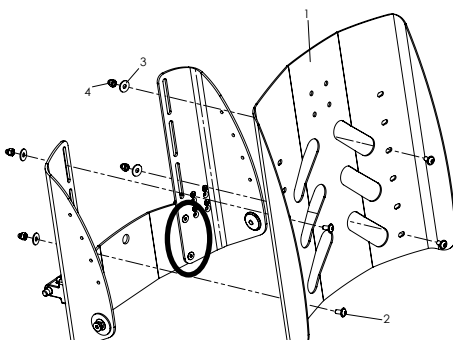
- Check for general damage
- Back panel height-adjustable and foldable
- Push handles or push bar removable or foldable
- Ratchet joint function for push handles
- Release of back angle adjustment
- Release of folding push bar/handles



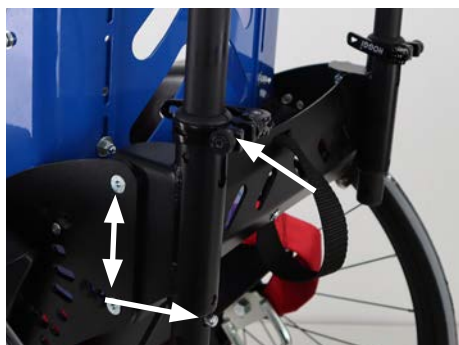
Back panel angle and height adjustable with removable push handles or push bar

Check of the screw connections:

- Screw connection for back height adjustment
- Connection to the seat adapter



- Connecting the crossbar to the back base



- Clamping lever for height adjustment of the push bar or handles
- Tripod spring for removal
- Screw connection of the crossbar to the seat



Backrest panel in trough shape

- Screw connection to the backrest height adjustment and to the clamps on the push handles
- Connection to the seat adapter



- Connection via support strut to seat adapter
- Release of the folding mechanism



- Connection of the crossbar to the seat adapter



- Push bar mounting to the back base panel



7.6 Braking system

Knee lever brakes

Functional test:

- Brake closure
- Faultless operation
- Visible damage



Brake HOGGI light

Brake opened

Functional test:

- Brake closure
- Faultless operation
- Visible damage



Brake closed

Check of the screw connections:

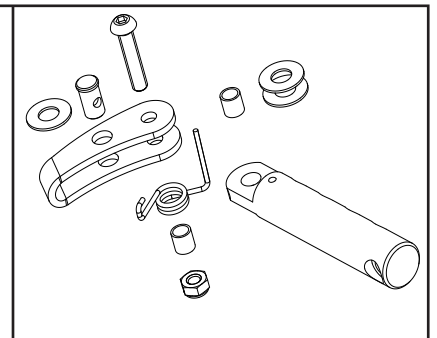
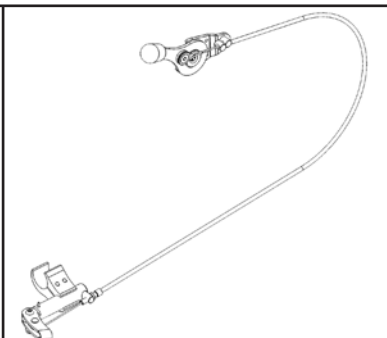
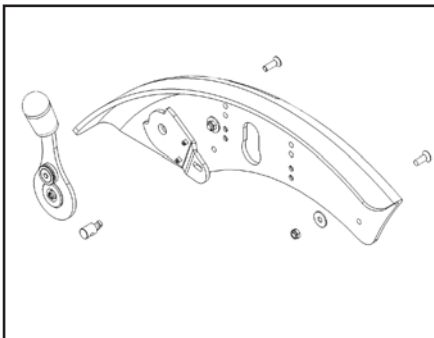
- Fixing the brake to the frame

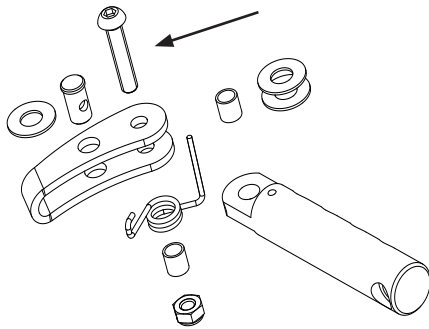


Integrated brake system

Consisting of:

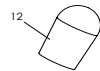
- Fender with integrated brake system
- Brake cable
- Brake





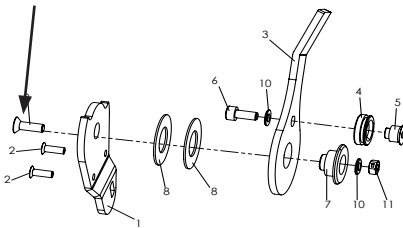
Functional test:

- Operability of the brake lever and smooth glide
- Good brake closure and contact pressure of the brake bracket
- Correct positioning of the brake lever in relation to the wheel. 90° angle and 3-5 mm wheel protrusion
- Check for general damage



Check of the screw connections:

- Fastening the brake lever to the fender
- Fastening the brake bracket to the brake bracket holder
- Bowden cable correctly looped in the cable pulley



Drum brake

Functional test:

- Build-up of brake pressure (readjustment at adjusting screw)
- Checking the brake lever for general damage (locking lever, cracks)
- Checking the Bowden cable (kinks or cracks)
- Check the brake anchor and brake pads (contamination, wear)



Check of the screw connections:

- Connection brake anchor with adapter
- Connection of brake anchor adapter with side plate
- Bowden cable correctly hooked in
- Screw connection of the brake handle to the handle unit



7.7 Wheel fork holder

Functional test:

- Swiveling of the wheel fork
- Smooth running or fluttering -> Checking the alignment
- Check for general damage to the forks



Check of the screw connections:

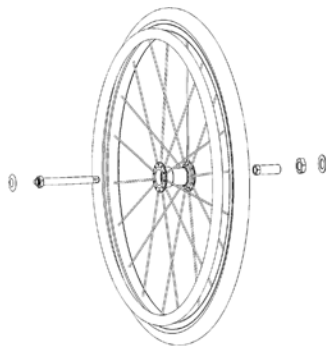
- Screw connection of the wheel axle
- Bolting the steering fork axle to the frame



7.8 Steering wheels

Functional test:

- Check for general damage
- Check of the tread or profile (cracks, heavy wear)
- Wheel curvature too worn (tread max. up to 5mm to edge of wheel)
- Contamination in the area of the wheel bearing or the axle



7.9 Rear wheels

Functional test:

- Check for general damage
- Checking the treads and air pressure
- Checking the locking
- Checking the running behaviour of the wheel, clearance, mechanics of the axle
- Checking of the correct alignment of the camber adapter and its bolting



Adjustment of the quick-release axle:

- The axle should be fitted with a minimum of clearance. If too much movement is possible, the front nut is closed slightly clockwise with a 19 mm open-ended spanner in a clockwise direction, while the rear axle is secured with an 11 mm open-ended spanner
- If the wheel is too tight, proceed in reverse order



7.10 Push rim

Functional test:

- Check for general damage
- Severe scratching and sharp edges

Checking the screw connections:

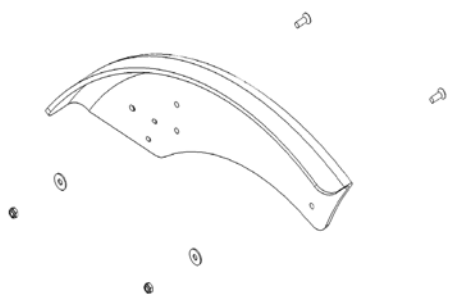
- Attachment of handrim to rim, also at correct distance

7.11 Fender

Standard fender

Functional test:

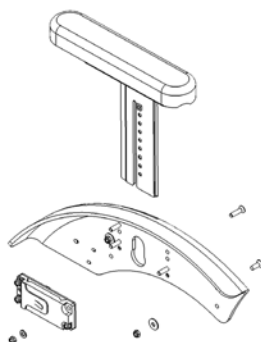
- Check for general damage
- Screw connection to the base plate firmly tightened



Fender with integrated armrests

Functional test:

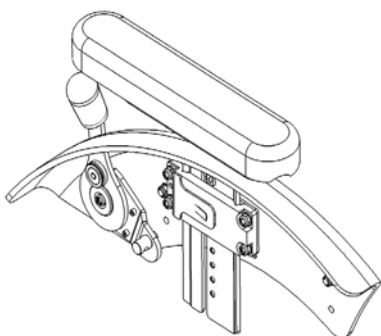
- Height adjustment and latching of the armrest
- Damage to the armrest cushion
- Damage to the release button
- Screw connection to base plate firmly tightened
- Armrest holder firmly screwed to wheel cover



Fender with integrated brake system and armrests

Functional test:

- Check for general damage
- Height adjustment and latching of the armrest
- Damage to the armrest cushion
- Damage to the release button
- Checking the brake unit (see 6.4 Brake system)
- Screw connection to base plate firmly tightened
- Armrest holder firmly screwed to wheel cover



7.12 Anti tip

Functional test:

- Check for general damage
- Correct positioning (beyond the wheel radius, 2-3 cm above the floor)
- Checking the swivel mechanism
- Checking the length adjustment



Check of the screw connections:

- Connecting screw to the guide plate (to check this, first remove plug and the bearing axle)



7.13 Footrest hanger

Footrest hanger

Functional test:

- Check for general damage
- Distance to the seat plate
- Screw connection to the seat plate



Footrest hanger angle adjustable

Functional test:

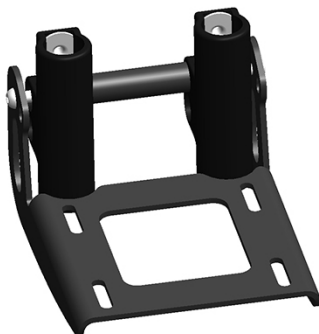
- Check for general damage
- Swivel mechanism
- Clamping lever for angle adjustment
- Screw connection to the seat plate



Single foot rest hanger

Functional test:

- Check for general damage
- Swivel mechanism
- Clamping lever for angle adjustment
- Screw connection to the seat plate



7.14 Footrest bracket

Standard

Functional test:

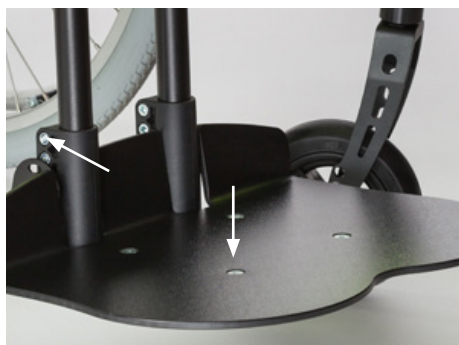
- Check for general damage
- Swivel mechanism of the screwed-on footrest
- Correct adjustment of the foot angle
- Sliding of the holder on the tubes



With locking

Functional test:

- Check for general damage
- Swivel mechanism of the screwed-on footrest
- Correct adjustment of the foot angle
- Sliding of the holder on the tubes
- Locking bolt pull with locking latches, tension of the cable



Check of the screw connections:

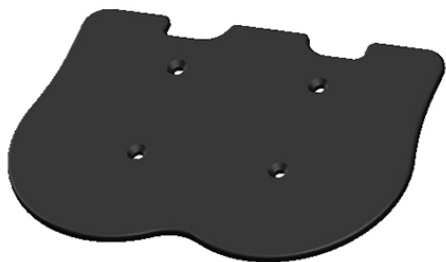
- Wing screws for lower leg length adjustment
- Screw connection of the swivel mechanism
- Screw connection to the footboard with correct angle adjustment

7.15 Footrests

Footrest standard

Functional test:

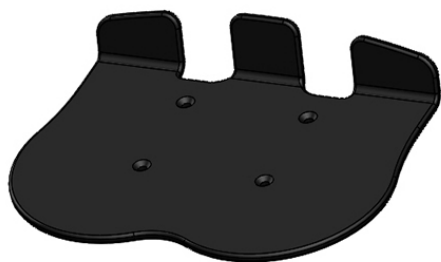
- Check for general damage
- Screw connection to the footrest holder



Foot rest with heel stop

Functional test:

- Check for general damage
- Screw connection to the footrest holder



Aluminium footrest in frame colour

Functional test:

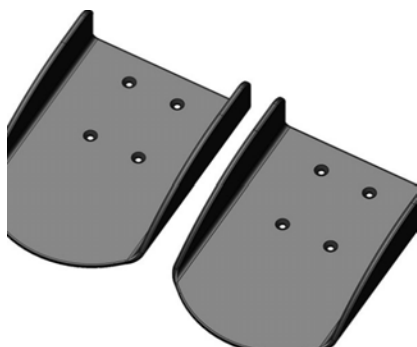
- Check for general damage
- Screw connection to the footrest holder



Single footplates in boat shape

Functional test:

- Check for general damage
- Screw connection to the footrest holder





7.16 Seat- and back cushion

Standard seat cushion

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination



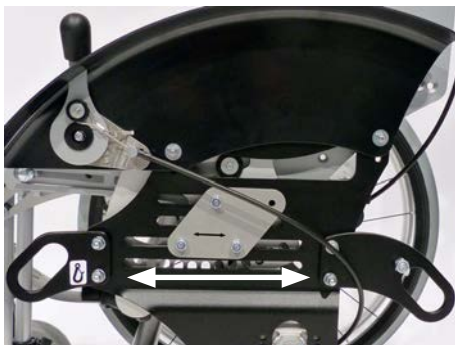
Seat cushion contoured

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination



Back cushion

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination



7.17 Tie down kit (ISO 7176-19)

Functional test:

- Check for general damage (deformation, sharp edges)

Check of the screw connections:

- Connection of the front and rear fuse to the base plate



7.18 Spoke guards

Functional test:

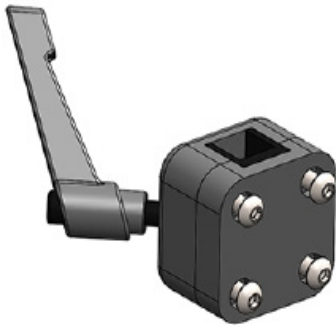
- Check for general damage (cracks)
- Fastening clips complete or defective
- Spoke guards suitable for wheel (drum brake or normal)



7.19 Headrest standard

Functional test:

- Check for general damage
- Checking the screw connection to the back plate



7.20 Headrest with occiput upholstery

Headrest bracket

Functional test:

- Check for general damage
- Checking the clamping ability
- Checking the screw connection to the back panel



Headrest with upholstery

Functional test:

- Adjustment possibilities
- Check for general damage (wear, cracks, etc.)
- Clamping ability

Checking the screw connections:

- Attachment of pad to support



7.21 Thoracic support

Functional test:

- Check for general damage
- Screw connection of the pad holder to the back plate



7.22 Chest-/ thoracic support

Functional test:

- Check for general damage
- Checking the belt buckle
- Screw connection of the pad holder to the back plate



7.23 Hip supports

Functional test:

- Check for general damage
- Width adjustment
- Depth adjustment on the seat plate and the pad itself
- Screw connection of the pad support under the seat plate
- Screw connection of the pad on the support



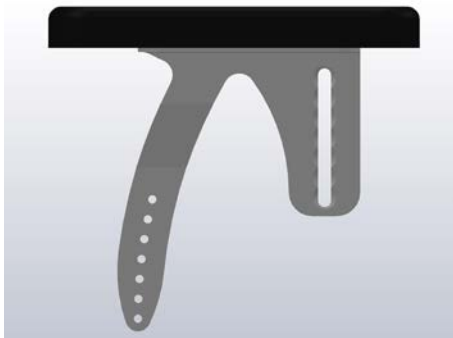
7.24 Abduction block

Functional test:

- Check for general damage
- Pivoting and latching mechanism
- Removal

Check of the screw connections:

- Bracket abduction block to the seat panel

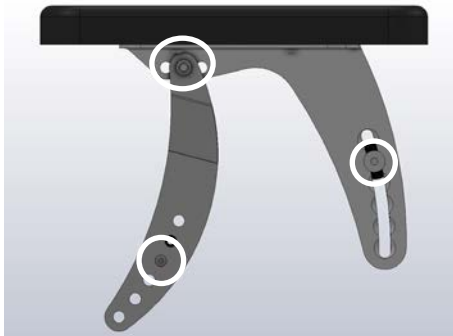


7.25 Armrests

Standard

Functional test:

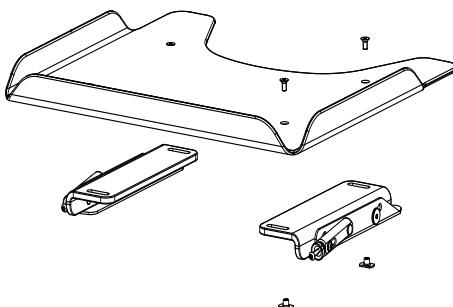
- Check for general damage
- Screw connection of the upholstery to the armrest support
- Connection of the armrest support to the seat mounting and to the tilt bearing



Armrests with tilt compensation

Functional test:

- Check for general damage
- desired angle of inclination
- Screw connection of the cushion to the armrest support
- Connecting screw for tilt adjustment
- Connection of the armrest support to the seat support and to the tilt bearing



7.26 Therapy tray

Functional test:

- Attachability and fixation of the table on the armrests
- Check for general damage (deformation, sharp edges)

Check of the screw connections:

- Connection of the front and rear fuse to the base plate



7.27 Belt fixations

Lap belt

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket



4-point lap belt

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket



Ankle hugger

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket to the footrest

8. *SWINGBO VTi* operating life::

The expected operating life of the ***SWINGBO VTi*** is 6 years, depending on the intensity of use, care as well as maintenance. We recommend an annual inspection by the authorized specialist dealer.

In case of malfunctions or defects of the wheelchair, it must be immediately handed over to the medical supply store or the specialist dealer.

9. Specifications

Dimensions (mm) and weights (kg)

Seat width	24	26	28	30	32	36
Seat depth	260 - 300	260 - 320	260 - 340	280 - 360	300 - 380	340 - 420
Back height	330 - 420	350 - 440	370 - 460	390 - 480	420 - 510	460 - 550
Seat angle	-5° up to + 45°					
Backrest angle						
Back angle and height adjustable	Adjustable in 10° steps from 75° - 115° or 80° - 120°					
Back, trough shaped	Adjustable in 5° steps from 85° - 105°					
Lower leg length	160 mm - 370 mm					
Footrest angle	-10° up to + 10°					
Seat height	360 mm - 470 mm					
Rear wheel diameter	20", 22", 24"					
Front wheel diameter	100 mm (4"), 125 mm (5"), 140 mm (5,5")					
Camber	3°, 6° or 9°					
Maximum load	60 kg					



CAUTION!

*The seat height depends on the frame size, the wheel diameter and the wheel camber.



CAUTION!

**Accessories and add-on parts reduce the remaining load capacity for the occupant..

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